

**AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions and listings of claims in the application:

1.-5. (Canceled)

6. (Original) A method for increasing food and energy uptake from a livestock feed by livestock comprising:

administering to the livestock a feed having an effective amount of hop acid capable of decreasing the production of unoxidized carbon sources in a digestive system fluid of the livestock.

7. (Previously presented) The method of claim 6 wherein the hop acid is selected from at least one of the group consisting of alpha acids, beta acids, isoalpha acids, rho-isoalpha acids, tetrahydroisoalpha acids and hexahydroisoalpha acids.

8. (Currently amended) The method of claim 7 wherein the alpha acids are selected from at least one of the group consisting of humulone, cohumulone,[[,]] and adhumulone.

9. (Original) The method of claim 7 wherein the beta acids are selected from at least one of the group consisting of lupulone, colupulone, and adlupulone.

10. (Original) The method of claim 6 wherein the amount of hop acid is 2 ppm of digestive system fluid.

11. (Original) The method of claim 6 wherein the livestock is selected from the groups consisting of cattle, horses, pigs, and zoo animals.

12. (Previously presented) The method of claim 6 wherein the hop acid is capable of increasing the level of propionate in the digestive system fluid.

13.-16. (Canceled)

17. (Previously presented) The method of claim 7, wherein the hop acids are selected from at least one of the group consisting of alpha acids and beta acids.

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| 18. | (Previously presented) | The method of claim 6, wherein the livestock is a ruminant.                          |
| 19. | (Previously presented) | The method of claim 6, wherein the livestock is a cow.                               |
| 20. | (Previously presented) | The method of claim 6, wherein the livestock is a poultry or fowl.                   |
| 21. | (Previously presented) | The method of claim 6, wherein the livestock is a chicken, duck, pheasant or turkey. |
| 22. | (Previously presented) | The method of claim 6, wherein the livestock is a pig.                               |
| 23. | (Previously presented) | The method of claim 6, wherein the livestock is a horse.                             |